

**Corps Meeting**  
**At the Bentley International User Conference (BIUC)**  
**Atlantic City Convention Center**  
**22 May 2002**

1. **Meeting Participants:** An open meeting was held for Corps employees who attended the conference. The following individuals were in attendance:

Headquarters

Jean McGinn, CADD Proponent  
Ray Lynn, Cost Estimating

CERL

Van Woods

Albuquerque District

Paul Rebarchik

Far East District (Korea)

O-Song Kwon

Ft. Worth District

John Dagley  
Steve Hutsell  
Ed Murphy  
Saji Puthenpurayel  
Kendall Waldie

Hawaii District

Santiago Mor

Jacksonville District

Roger Porzig

Memphis District

Mike Watson

New England District

Scott Flanagan

Rock Island District

John Kincaid

Sacramento District

Mary Diel

Savannah District

Doug Trehern

Seattle District

Glenn Kato  
Cynthia Masten

St. Paul District

Chris Afdahl  
Steve Grannes  
Greg Porycky  
Lori Taylor

Trans Atlantic Center

Joyce Rudy  
Jim Nixon

Guests

Jim Stirk (Instep)  
Rich Malm (Corps – Retired)  
Lou Pender

2. **Purpose:** The purpose of this meeting was to give people in the districts access to HQ personnel and give HQ personnel access to district personnel. This meeting also provided a forum for discussing the A/E/C Workspace, DocTools, CADD Standard implementation, and the Bentley International User Conference.

### 3. A/E/C CADD Standard Workspace

**3.1 Usage:** Only one district (SWF) out of the 13 districts represented indicated that they were using the Workspace. Most districts indicated they were implementing the CADD Standards, but using their own custom menus/settings files. Some of the reasons cited were:

- a. Menus are too nested.
- b. Needs more automated tools. *Users should provide suggestions to Steve Spangler.*
- c. File is currently stamped with a scale. Users need to be able to change scale if necessary. Add menu item.
- d. When the sheet border is placed, it doesn't understand the scale you placed initially.
- e. SWF requests that elements be tagged as they are placed (without having the checker active). Would like the checker to check by tag rather than symbology.
- f. V8 level tables are required.

**3.2 Feature Clarifications:** The following information/clarification was provided regarding the use of the current version of the Workspace:

- a. Checker embeds linkage into each item so that the checker knows what it is.
- b. If the checker is active, the linkage is embedded as you go.
- c. File is currently stamped with scale. Element placement affect by scale includes cells, text size, dimensions and patterns.

**3.3 Future Enhancements:** With V8, we will revisit the way we implement the Workspace. Jim Stirk of Instep indicated that the V8 version of the Workspace will be submitted to the CADD Center for review sometime in June. The DocTools utility will be incorporated into the workspace. This tool places and adds intelligence to sheet borders, cut/detail symbols and view titles. At present, links between cut/detail locations and the section/detail are only active in MaxView. It is anticipated that this feature will be available for use in the design file itself by the time it is incorporated into the workspace. A request was made to allow the use of subtitles in the view title (target).

**4. MDL program recompiling:** The list of MDL programs, which are currently recompiled for use with MicroStation V8 includes civtools, drftools, steel, and newtbl. The programs which have been recompiled are available on the CKB website at [http://ckb.wes.army.mil/index\\_sfacs.htm?http://ckb.wes.army.mil/sfac/sfac\\_descrip.htm](http://ckb.wes.army.mil/index_sfacs.htm?http://ckb.wes.army.mil/sfac/sfac_descrip.htm). If you have any comments/requests regarding the MDLs, contact Ed Mathison (Louisville District).

5. **Cost Estimating:** Ray Lynn of HQ stated that Cost Estimating is trying to get more involved in CADD. He ask that district use caution when using tags, so that everyone doesn't go in their own direction. It could make it more difficult to integrate other systems. Requested CADD/GIS users keep in mind that Cost Estimating and other systems will be looking to integrate with our software. When using objects we need to be able to go between applications. Cost is recommending the use of On-Screen Takeoff software for calculating quantities. They are looking for a system that will read DWG and DGN files so that they won't have to wait until the last minute to do quantities. Cost needs to look at Triforma, Inroads, and Geopak for integration with cost software.
6. **Construction Engineering Research Laboratory (CERL):** CERL researchers want to know how to best interact with the rest of the Corps. They want to know what they can do to help. They are very interested in Triforma. They are looking at how to use current technology to create custom objects. Everyone is encouraged to look at their website (<http://www.cecer.army.mil/td/tips/index.cfm>). They are trying to develop a plan for future ways to do business. Contact Van Woods if you would like to provide input.
7. **Objects:** ESRI/Bentley relationship could have an impact on the way we deal with objects. M.K. Miles, HQ, is looking at a common delivery framework. This has to do with defining objects in a generic way. Common delivery framework will probably not be implemented within the next year; but it has potential and backing. Bentley says they are going to be compliant with the IFC...but that doesn't mean the objects will be able to be used by other applications. XML is just the structure; the language is IFC. Just because they have the same structure, it doesn't mean they will be able to talk to each other. Each XML file should have a schema setting a range of acceptable values. XML is a text file (Van). CERL is very involved with object technology. Tools are coming down the pipeline.
8. **V8 Usage:** Most districts represented indicated they would be migrating to MicroStation V8 within the next year. Five districts indicated they are currently using V8.
9. **Field Action CADD (FAC) Groups:** Jean McGinn suggested that users try to tie into one of the monthly FAC teleconferences. FAC should be opening dialog between districts so that we can help each other.
  - a. CADD Managers should participate in the System FAC conference calls. The SFAC doesn't have regularly scheduled meetings, but meet frequently. Email John Kincaid if you wish to be notified of the meetings.
  - b. The Structural FAC holds monthly conference calls, for further information, contact Lori Taylor.
  - c. The Electrical/Mechanical FAC holds monthly conference calls. For further information, contact Kendall Waldie.

- d. The Geotechnical FAC holds monthly conference calls. For further information, contact Glenn Kato.
  - e. The Architectural FAC does not meet on a regular basis. Those involved with the architecture should tie in to one of the other FACs or contact Stan Shirk.
  - f. The Cost Engineering FAC meets on a regular basis. For further information, contact Garreth Clausen.
- 10. Triforma Users Group:** Van Woods, CERL, would like to start a Triforma Users Group. Van will contact Stan Shirk to find out how many from the architectural side would be interested in starting up a group. Mechanical and structural Triforma Users would also be included. Contact Van if you are interested.
- 11. A/E/C CADD Standard:** Jean McGinn, HQ, has been tasked with developing guidance regarding the use of the A/E/C CADD Standard. This guidance will be issued as an Engineering Construction Bulletin. Jean needs to know which districts are using the standards and to what extent. She asked that one person from every division check with the district in their division to gather this information. This is an informal survey. *Lori Taylor will contact MVD districts.*
- 12. Corps Knowledge Base (CKB):** The CKB needs to be updated. Mary Diel and John Kincaid are working on it. Mary updated the database. *John will email to all CADD managers to request the districts update.* Info will be available for download from CKB via a passworded zip file.
- 13. Science & Engineering Technology (SET) Implementation:** This deals with how HQ will deliver software throughout the Corps. Jean developed a list of all the software used by districts. This list needs to be updated. HQ trying to find out what software is being used and what software is needed to work with what. Jean is a part of the SET. They will be developing a project management plan. This is a combined effort between the ERDC and Engineering.
- 14. CADD/GIS Symposium Booth:** FACs will man the booth. We need ideas regarding what we should have there. It is important get people to become part of the team. *John Kincaid will talk with FAC chairs to discuss what we need to show at the booth.*
- 15. IM Budgets:** *Please send John Kincaid a copy of your IM budgets from last year.*
- 16. BIUC Conference Discussion:** Discussion was held regarding what the participants liked about the conference and what we can do to implement the technology.
- a. Overall the participants agreed that the technology is there...things are looking bright. Now is the time we need to focus on our processes. There are so many tools we could use and want to use, but we need a process established. The

Corps is falling behind. We are only utilizing a fraction of what is available. It is tough to get the users to utilize anything new. The majority of users stay in a safety zone, only using the tools they have always used. These users are mentoring new engineers and technicians, so the new users are not being exposed to all that is available.

- b. There is a need to track projects from conception to project completion.
- c. We have to get the users to the tools they need.
- d. Need more people from the management level to attend future Bentley Conferences. Corps needs more technical support for users to make this work, and for this we need management support.
- e. We need to somehow get more users to this type of function.
- f. Keep things simple.
- g. V8 will help us implement our standards. The sooner we can get V8 on users desks the faster we will see an increase in productivity (anticipate a 10% increase in productivity).
- h. There were not enough free technical sessions. Without taking classes, the tips and tricks are not as available. Aside from the workshops and classes, the conference seemed to focus more about what Bentley has done and not how to do it
- i. Digital Signatures available in the 3<sup>rd</sup> quarter release of V8 will be very useful. *Anyone who knows PKI (Public Key Infrastructure) needs to get with John Kincaid.* Bentley is interested in making their electronic signatures work with our PKI.
- j. We need to set goals for ourselves to win some of the Bentley Awards.
- k. ESRI Integration was the most interesting piece of technology.
- l. *Everyone needs to get a copy of the courses they paid for to John Kincaid (email) and we will see if we could get the course fees waived.*
- m. The opportunity to network with other Corps districts was worth attending the conference in itself.
- n. More communication is needed within the Corps. Many times information does not get to those who need it. Groups and initiatives are established without input from those most affected.
- o. TAC rotates people in to work with CADD Manager each month.
- p. The electronic signature feature that will be available in the next release of MicroStation V8 was very impressive.
- q. Districts are having problems getting spec engineers to save their data to the project directory.
- r. O-Song Kwon formerly worked for Bentley.

- 17. MicroStation V8 Implementation:** It would be helpful if the Systems FAC could set up a SWAT team for V8 implementation. Teams would go to districts, upon request, to assist the local CADD manager with setting up V8. The requesting districts would cover expenses.

18. **Awards:** Harold Smith, ERDC, suggested that we should have an award within the Corps for innovative use of technology in the preparation of plans. This could be part of the design awards given by Headquarters. *Jean McGinn will look into this.*
19. **P2 Initiative:** CADD groups need to get involved with P2 (<http://www.hq.usace.army.mil/pmbp/P2/P2.htm>). CERL building composer...has to do with design criteria. We need more communication.
20. **GIS Collaboration:** *People need to go back to their districts and talk to their GIS and hydraulics people about CADD/GIS integration.*
21. **Future Meetings:** For future meetings of this type, we will try to meet before the conference starts and then again at the end.